

Amendments to the Claims:

REPLACE all prior versions of listings of claims and claims in the application with the following listing of claims below:

Listing of Claims:

1 (canceled).

2 (canceled).

3 (canceled).

4 (withdrawn). The switching-mode power converter as set forth in claim 1 wherein said first complementary control circuit being disposed between said first end terminal of said secondary winding and said first switching circuit, and said second complementary circuit being disposed between said second end terminal of said secondary winding and said second switching circuit.

5 (canceled).

6 (canceled).

7 (withdrawn). The switching-mode power converter as set forth in claim 6 wherein said first complementary control circuit being disposed between one of said end terminals of said secondary winding and said first switching circuit, and said second complementary circuit being disposed between the other of said end terminals of said secondary winding and said second switching circuit.

8 (withdrawn). The switching-mode power converter as set forth in claim 7 wherein each of said complementary control circuits includes a NOR circuit having two inputs and an output, wherein one of said inputs being connected to a resistor and diode connected in

parallel, and the other of said inputs being coupled to one of said terminals of said secondary winding, said output being disposed to drive one of said switching circuits.

9 (withdrawn). The switching-mode power converter as set forth in claim 8 wherein each said complementary circuits further including an inverter circuit coupled thereto, said inverter circuit being disposed to drive a capacitor which in turn is connected to input of the other of said complementary control circuits.

10 (canceled).

11 (canceled). The switching-mode power converter as set forth in claim 6 wherein each of said complementary control circuits includes an inverter circuit.

12 (canceled).

13 (canceled).

14 (withdrawn). The switching-mode power converter as set forth in claim 6 wherein said input circuit is a half-bridge switching circuit and said output circuit is a full-wave switching circuits.

15 (withdrawn). The switching-mode power converter as set forth in claim 6 wherein said input circuit is a full-bridge switching circuit and said output circuit is a full-wave switching circuits.

16 (withdrawn). The switching-mode power converter as set forth in claim 6 wherein said output circuit is a current doubler circuit.

17 (canceled).

18 (canceled).

19 (canceled).

20 (canceled).

21 (canceled).

22 (canceled).

23 (currently amended). A switching-mode power converter comprising:

input and output circuits;

a transformer having primary and secondary windings respectively coupled to said input and output circuits, said secondary winding includes first, second and mid terminals, said primary winding includes third and forth terminals;

first and second switching circuits, each of said switching circuits having one end coupled to one of said first and second terminals of said secondary winding and an other end connected to a common node;

third and fourth switching circuits respectively coupled to said third and fourth terminals of said primary windings;

a filter circuit having an inductor and a capacitor connected in series, said inductor being connected to said mid terminal of said secondary winding, and said capacitor being connected to said common node; and

first and second complementary control circuits respectively disposed to drive said first and second switching circuits, said first complementary control circuit being disposed between said first and third switching circuits, and said second complementary control circuit being disposed between said second and fourth switching circuits. The switching-mode power converter as set forth in claim 22 wherein said inverter circuit includes each of said complementary control circuits includes an inverter circuit having an inverter input, a resistor and a diode connected in parallel disposed at said inverter input, said inverter circuit further including a capacitor disposed at said inverter input.

24 (withdrawn). The switching-mode power converter as set forth in claim 19 wherein said first complementary control circuit being disposed between said first terminal of said secondary winding and said first switching circuit, and said second complementary control circuit being disposed between said second terminal of said secondary winding and said second switching circuit.

25 (withdrawn). The switching-mode power converter as set forth in claim 24 wherein each of said complementary control circuits includes a NOR circuit having two inputs and an output, wherein one of said inputs being connected to a resistor and diode connected in parallel, and the other of said inputs being connected to one of said terminals of said secondary winding, said output being disposed to drive one of said switching circuits, each of said complementary control circuits further including an inverter circuit coupled thereto, said inverter circuit being disposed to drive another capacitor which in turn is connected to the input of the other of said complementary control circuits.